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| 10/018,574 | 12/20/2001 | Yuri Iwano | 1907-0205P | 5010 |
| 2292 | 7590 | 05/12/2006 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | SONG, JASMINE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2188 | |

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,574

Applicant(s)

IWANO, YURI

Examiner

Jasmine Song

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/13/2005.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

Detailed Action

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 07/13/2005 (foreign document) is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Igarashi et al., U.S. Patent 6,122,646 B1.

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Regarding claim 1, Igarashi teaches that a disk medium managing method for managing data to be recorded on a disk medium (col.3, lines 25-30) by file format (col.3, lines 20-30) and representing a hierarchical structure by directories (col.3, lines 27), comprising:

pre-defining an area (it is taught as the second area, col.5, lines 46-67 and lines 62) on the disk medium as a directory (it is taught as a root directory and parent directory, col.5, lines 60) by storing on the disk medium area location information (it is taught as predetermined location information which is first location information (e.g., Volume Descriptor of Fig.5, col.5, lines 61), and second location information and third location information, (e.g., Index to DRB of Fig.8 and Index to ER of Fig.8; col.5, lines 60 to col.6, lines 7) for the area (col.5, lines 62), and

recording files and directories within the area defined as the directory based on the stored area location information (it is taught as recording data in the second area may be caused to include information (e.g., Volume Descriptor of Fig.5 which is predetermined) indicating location of root directory in the second area; col.3, lines 65-67).

Regarding claim 2, Igarashi teaches further comprising hierarchically pre-defining a further directory (it is taught as sub directory, col.5, lines 63-66) in an area (it is taught as the root directory and parent directory, lines 66) within the area pre-defined (it is taught as the second area) on the disk medium as the directory.

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Regarding claim 3, Igarashi teaches further comprising selectively deciding whether the area is pre-defined on the disk medium or not (col.13, lines 44-49).

Regarding claim 4, Igarashi teaches that wherein hierarchical definition of the directory for pre-defining the area on the disk medium is restricted by that the directory (it is taught as sub directory, col.5, lines 63-66) must be defined under a directory (it is taught as the root directory and parent directory, lines 66) having a pre-defined area (it is taught as the second area) on the disk medium.

Regarding claim 5, Igarashi teaches that wherein the area pre-defined on the disk medium is continuously arranged thereon (col.15, lines 36-37 and col.16, lines 8-21).

Regarding claim 8, Igarashi teaches said area location information for said directory includes a beginning block number and a number of continuous block numbers after the beginning block (col.15, lines 27-30).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi et al., U.S. Patent 6,122,646 B1, in view of Walker., U.S. Patent 6,134,586.

Regarding claims 6 and 7, Igarashi teaches the claimed invention as noted above (claim 1), Igarashi does not teach that calculating a maximal time of seeking data in the areas pre-defined on the disk medium and specifying a maximal allowable time of seeking data in an area to be pre-defined on the disk medium and calculating an area on the disk medium satisfying the specified allowable seek time as disclosed in the Specification, page 18 to 19. However, Walker teaches that calculating a maximal time of seeking data in the areas pre-defined on the disk medium (the maximum seek time as disclosed in the col.3, lines 22-23 and col.4, lines 17-18) and specifying a maximal allowable time of seeking data in an area to be pre-defined on the disk medium (the maximum average seek time as disclosed in the col.3, lines 27-32) and calculating an area on the disk medium satisfying the specified allowable seek time is taught as the maximum average seek time can be reduced to about half the maximum seek time (col.3, lines 30-32). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Walker in the system of Igarashi and utilize the longest seek time for seeking the data in the area on the disk and make sure the time to record the data between two different locations is less than the specified allowable seek time because it would reduce the seek time by dividing up the storage area of the disk into multiple-ring shaped zones (col.3, lines 27-32) and provide the maximum efficiency of reading or writing.

Accordingly, one of ordinary skill in the art would have recognized this and concluded that they are from the same field of endeavor. This would have motivated one of ordinary skill in the art to implement the above combination for the advantage set forth above.

Response to applicant's Arguments

7. Applicant's arguments filed 01/27/2005 have been fully considered but they are not persuasive.

In response to applicant's argument "Igarashi's volume Management Area fails to teach an area on a disk medium predefined as a directory and Igarashi's first location information and second location information and third location information fails to teach area location information stored on the disk and indicating the location of the predefined area" in the page 3 of remarks, however, it is noted that Igarashi teaches predefining a second area which includes a root directory on the basis of predetermined location information (col.4, lines 64-67) and recording files and directories (Fig.8) in the second area based on the predetermined location information (col.3, lines 65-67).

In response to the applicant's argument that "the claim recites recording, the context of sections in Igarashi relied on in the rejection are directed to retrieval of files and directories" in the page 4 of remarks, however, it is noted that Igarashi also teaches recording data files and directories as shown in the claims 8 and 15 (see col.3, lines 24 to col.4, lines 45), the Examiner's rejection as shown above has been updated.

In response to the applicant's argument that "Igarashi fails to disclose that allocation units in the extent area are pre-defined as a directory" in the page 4 of remarks, it is noted that this limitation is not cited in the rejected claim(s). although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Therefore, broadly written claims are disclosed by the references cited.

8. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

9. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jasmine Song whose telephone number is 571-272-4213. The examiner can normally be reached on 7:30-5:30 (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jasmine Song

Patent Examiner


May 3, 2006



Mano Padmanabhan

Supervisory Patent Examiner

Technology Center 2100


5/11/06

MANO PADMANABHAN
SUPERVISORY PATENT EXAMINER